

Noteworthy Marine Fishes from Eastern Louisiana

JERRY G. WALLS

OVER the last ten years, a small collection of local fishes has accumulated at the Louisiana Wild Life and Fisheries Comm. Marine Biology Laboratory on Grand Terre Island, Louisiana. Many of the specimens were collected incidental to shrimp studies and saved for later identification. Although most came from Barataria Bay, many were collected between 15 and 25 miles south of Grand Isle, where average depths of 15 to 25 fathoms occur. A few other specimens were donated by charter boat captains who found their catches to be of unusual interest. Although often poorly preserved, some specimens in this collection are noteworthy and are reported here.

1. *Hemanthias vivanus* (Jordan and Swain). Red barbier. Three specimens of this beautiful fish were caught on 4 Dec. 1970, by Mr. Jess Lane, while fishing with squid bait for red and vermilion snapper. They were caught near Rig 122-C, southeast of Grand Isle near the Mississippi River delta, at a depth of 260 feet. All three specimens were of similar size. Data on the single available specimen follow: total length 343 mm; standard length, 257; depth at anal base, 87.5; head, 85.5; snout, 27.5; eye, 19; interorbital, 19.5; upper caudal lobe, 72; lower caudal lobe, 79; left ventral, 134; pectoral, 62; caudal peduncle depth, 40; dorsal spines: 1st, 10; 2nd, 20; 3rd, 72; 4th, 27; 7th, 22; 10th, 17.5; first dorsal ray, 26; first anal spine, 11; second, 20.5; third, 23 mm. D. X, 13; A. III, 8; P₁, 17-18; P₂, I, 5; pored L1. scales, 52; GR, lower limb, 26. This specimen was a mature male with large (55 mm long), firm testes. The peritoneum was white; stomach contents consisted of a small amount of blue-gray mud and a packet of very small, silvery fish scales; the gas bladder was expanded into the mouth.

Of Gulf of Mexico anthiids, only *Hemanthias vivanus* and *H. leptus* resemble the present specimen. Louis R. Rivas (*in lit.*, Feb., 1971) separates *H. vivanus* from *H. leptus* by more gill rakers (30 in *H. vivanus* vs. 26 in *H. leptus*), fewer pored lateral line scales (48-50 vs. 55), elongated, flexible third dorsal spine (pungent and of normal length in *H. leptus*), and the absence of a deeply lunate caudal fin (deeply lunate in *H. leptus*). The present specimen agrees with *H. vivanus* in the prolonged dorsal spine and nearly

truncate caudal fin; the scale count is intermediate, and the gill raker count fits *H. leptus*. Available descriptions of these species (Jordan and Evermann, 1896; Longley and Hildebrand, 1940, 1941; Ginsburg, 1952) are confusing and provide little information of value. The confusing aspects of the Louisiana specimen may be due to normal variation and to sex or degree of maturity. It is referred to *Hemanthias vivanus* pending a revision of the genus.

2. *Alectis crinitus* (Mitchill). African pompano. Although juveniles of this species are occasionally reported from the northern Gulf of Mexico (Springer and Hoese, 1958; Richmond, 1968), adults appear to be very rare. A large (615 mm SL, 10 pounds) male was taken on hook and line (squid bait on snapper rig) by charter boat captain Charlie Sebastian in late August, 1970. The specimen comes from Block 130 south of Timbalier Island, about 40 miles south of Grand Isle, in about 185 feet of water. It appears to be the first published Louisiana record, and the first adult recorded from the northern Gulf, excluding Florida. Measurements: greatest depth, 270; head length, 171; eye, 33; pectoral, 184; longest anal ray, 249 mm. The dorsal fin was still filamentous, with at least one ray (others broken) extending beyond the caudal fin; filaments were banded with black and white much as in juveniles. Black blotches were present at the upper edge of the operculum, above the eye, and on the dorsal half of the caudal peduncle. The testes were large, unequal (right 82, left 70 mm long), and firmly connected to the gut by tough membrane; surfaces were rough, like shagreen. Stomach contents consisted of five large (90 mm total length) mantis shrimp, *Squilla empusa*. All were doubled-up, with the bend pointed posteriorly; three specimens were quite fresh in appearance. The stomach, liver, and pyloric caeca were covered by a partially transparent, tough, and adherent membrane; peritoneum white.

3. *Kyphosus sectatrix* (Linnaeus). Bermuda chub. This mostly tropical and Gulf Stream species is reported by SCUBA divers to occur in large schools near oil rigs in clear water south of Grand Isle. The only available specimen, 265 mm SL, was speared 16 Aug. 1960, south of Grand Isle. Dawson (1963) reported one specimen from off Cat Island, Mississippi, but the present specimen apparently represents the first Louisiana record.

4. *Holacanthus bermudensis* Goode. Blue angelfish. This species

is also reported to be common near oil rigs in clear water. The available specimen measures 188 mm SL, with an indistinct nape spot and a dark caudal fin with a light terminal band. It was speared 16 Aug. 1960, south of Grand Isle, and represents the first Louisiana record.

5. *Nomeus gronowi* (Gmelin). Man-of-war fish. This pelagic fish is seldom recorded inshore along the Gulf coast, and only three small specimens are available. One specimen, 17.9 mm SL, was taken on 16 April 1961, near the Freeport Sulphur Rig, 4 miles south of Grand Isle. Two additional juveniles, 22.1 and 18.8 mm SL, were dipnetted in the boat basin at Grand Terre I. on 7 Dec. 1961. All three specimens had three brown body saddles, one saddle on caudal peduncle, and long black pelvics connected to the body by a membrane.

6. *Erotelis smaragdus* (Valenciennes). Emerald sleeper. Dawson (1969) reported only two records of this goby in Mississippi and indicated that it is rarely collected. Four Louisiana specimens are in the collection, three from within Barataria Bay. Two juveniles (48.3 and 45.4 mm SL) were taken at Middle Bank Light in April, 1969, and another juvenile (47.8 mm SL) was collected near Independence Island, 20 Jan. 1971. In life this specimen was gray-brown with numerous small dark spots on the sides; dorsal and anal fins were streaked with brown, and the caudal fin was uniformly dark brown. The single large specimen, 103 mm SL, was taken 25 miles south of Grand Isle in May, 1961. These specimens seem to be the first recorded from Louisiana.

LITERATURE CITED

- DAWSON, C. E. 1963. *Kyphosus sectatrix* in the Gulf of Mexico with a new record from Mississippi. *Copeia*, no. 1, pp. 181-182.
- . 1969. Studies on the gobies of Mississippi Sound and adjacent waters II. An illustrated key to Gobiod fishes. *Publ. Gulf Coast Res. Lab. Mus.*, no. 1, pp. 1-59.
- GINSBURG, ISAAC. 1952. Eight new fishes from the Gulf Coast of the United States, with two new genera and notes on geographic distribution. *J. Wash. Acad. Sci.*, vol. 42, no. 3, pp. 84-101.
- JORDAN, DAVID STARR, AND BARTON W. EVERMANN. 1896. The Fishes of North and Middle America. . . . *Bull. U. S. Nat. Mus.*, vol. 47, part 1, pp. i-lviii, 1-1240.
- LONGLEY, WILLIAM H., AND SAMUEL F. HILDEBRAND. 1940. New genera and

- species of fishes from Tortugas, Florida. Carnegie Inst. Wash., Papers Tort. Lab., vol. 32, no. 14, pp. 223-285.
- . 1941. Systematic catalogue of the fishes of Tortugas, Florida with observations on color, habits, and local distribution. *Ibid.*, vol. 34, pp. i-xiii, 1-331.
- RICHMOND, E. AVERY. 1968. A supplement to the fauna and flora of Horn Island, Mississippi. Gulf Res. Rpts., vol. 2, no. 3, pp. 213-254.
- SPRINGER, VICTOR G., AND HINTON D. HOESE. 1958. Notes and records of marine fishes from the Texas coast. Texas J. Sci., vol. 10, no. 3, pp. 343-348.

P. O. Box 49, Hightstown, New Jersey 08520.

Quart. Jour. Florida Acad. Sci. 35(2) 1972(1973)